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New Pension Statement: Guide To Application

Kathryn M. Means

The New Pension Statement

Guide To Application

By Kathryn M. Means

Introduction

SFAS No. 87, "Employer's Accounting For Pensions," was issued in December, 1985. The statement is effective for financial statements issued after December 15, 1986, and will have a substantial impact on financial reporting when it is fully implemented.

The standard applies to any arrangement that is similar in substance to a pension plan, but the thrust of the statement is defined benefit plans that specify the amount the employee will receive at retirement rather than the amount that the employer will contribute. The basic theoretical principle stated in the standard is that pension benefits are not gratuities but are to be considered part of compensation. Therefore, the cost of those benefits should be matched against revenues during the years in which the employee performs the services which entitle him to benefits under the terms of the plan.

Net Periodic Pension Cost

The following paragraphs discuss the computation of the amounts to be included in net periodic pension cost for the period. In all, there are six components. Some of these amounts will be supplied by the actuary, but most must be calculated by the company and require the use of some new concepts and new calculations introduced by this standard.

The first component is SERVICE COST, which is a new name for the old term "normal cost." Service cost is the actuarial present value of the benefits attributed to the period. This figure will be provided by the actuary.

The second component is INTEREST COST, which represents the growth in the projected benefit obligation due to the passage of time. The PROJECTED BENEFIT OBLIGATION (PBO) is the present value of the benefits expected to be paid under the terms of the plan for service rendered prior to a particular date. It must be calculated using the "benefits-per-year-of-service" method and should incorporate assumptions regarding future events such as salary increases, promotions, changes in social security, inflation, etc. The interest cost is calculated by multiplying the total projected benefit obligation at the beginning of the period by the settlement rate used to discount the projected benefits.

The settlement rate, another new concept in this standard, is the market rate at which the plan obligations could be effectively settled. In other words, it is the rate an insurance company would use to determine its charge to the company if the decision was made to purchase annuity contracts to provide for the benefits specified in the plan. This rate should be determined annually by the company through verification of market rates.

ACTUAL RETURN on plan assets is the third component. This is the difference between the fair market value of the plan assets at the beginning and end of the period, adjusted for contributions and payments to pensioners. Normally, the actual return will be positive and, therefore, will result in reducing net periodic pension cost for the period.

The fourth component is the AMORTIZATION of unrecognized prior service cost. Prior service cost, defined exactly as it is under APB 8, is the increase in the projected benefit obligation due to a plan amendment which grants additional benefits for service rendered prior to the date of the amendment. Note, however, that the standard considers prior service cost as arising subsequent to the application of SFAS 87. There is no carryover of prior service cost from the old standard. Any previously existing amounts of prior service cost are included as part of a transition amount that is calculated at the point of initial implementation of the new standard.

The amortization period is "future service years" for the employees benefiting from the plan amendment. FUTURE SERVICE YEARS and AVERAGE REMAINING SERVICE PERIOD are new time periods

TABLE 1

Calculation of Future Service Years and Average Remaining Service Period

Assume the following data relating to the employee group:

Ten employees, 2 of whom will leave the company each year over the next 5 years.

Formula for calculation of Future Service Years:

$$[T(T+1)/2] \times [L]$$

where T = the time horizon, 5 years in this case.
L = the number leaving each year, 2 in this case.

Future Service Years: 30 = [5(6)/2] 2

Formula for Average Remaining Service Period:
Future Service Years/N

where N = number of employees

Average Remaining Service Period: 3 = 30/10 introduced by SFAS 87. Conceptually, these are the years during which the employees will perform the services that entitle them to benefits under the plan and thus are the appropriate time periods over which to match the costs associated with those benefits. Table 1 demonstrates the calculation of both future service years and average remaining service period.

The amortization amount, included as part of net periodic pension cost, is calculated in a manner similar to sum-of-the-years-digits depreciation (straight-line is allowed as long as the amortization is not less than the amount generated using the future service years approach). Table 2 contains an amortization schedule for prior service cost, based on the assumptions (ten employees, two leaving the company each year) used in Table 1.

TABLE 2
Amortization of Prior Service Cost

Prior Service Cost created by plan amendment at beginning of year X1 $50,000

Amortization Schedule

Year	Amortization Amount
X1	50,000(10/30) = 16,667
X2	50,000(8/30) = 13,333
X3	50,000(6/30) = 10,000
X4	50,000(4/30) = 6,667
X5	50,000(2/30) = 3,333

The fifth component of net periodic pension cost is defined as GAIN OR LOSS. In actuality, this gain or loss is the combination of two entirely different items. It is the sum of 5a) — the asset gain or loss for the period — and 5b) — the amortization of the net unrecognized gains and losses at the beginning of the period.

The asset gain or loss for the period is the difference between the actual return (component 3) and the expected return. The expected return is based on MARKET RELATED VALUE OF PLAN ASSETS (MRV), another new concept introduced in the standard. The expected return for the current period is calculated by using the market related value of plan assets at the end of the preceding period.

The market related value is defined as being either (1) the fair market value or (2) a calculated value that recognizes changes in the fair market value of plan assets in a systematic and rational manner over a period not to exceed five years. Use of fair market value that would incorporate all market fluctuations in net periodic pension cost as they occur is allowed; however, it appears the calculated value will be used since it represents less change from prior practice. The calculated value incorporates asset gains or losses as part of pension expense on a gradual basis.

This procedure is conceptually similar to the "spreading of actuarial gains or losses" required by APB 8, which anticipated that actual results for any one period might differ dramatically from expectations but in the long run would "average out." The procedure differs in that only asset gains and losses are incorporated into the market related value in this systematic manner. Actuarial gains and losses are included in "unrecognzed gains and losses" and dealt with in a separate calculation. Table 3 demonstrates the calculation of the expected return, the actual return, and the market related value,

TABLE 3
Calculation of Market Related Value of Plan Assets

Data for illustration:

SFAS 87 adopted 1/1/87		
Fair market value (FMV) of assets 1/1/87	=	$3,000,000
Long-run expected return on assets	=	10%
1987 contributions to plan	=	$ 600,000
1987 payments to pensioners	=	$ 600,000
Fair market value of assets 12/31/87	=	$3,400,000

Asset gains/losses to be included at the rate of 20% per year (i.e., 5-year spread).

Calculated Input Data:

1987 Expected Return: MRV on 1/1/87 times expected rate (on initial application MRV = FMV)
$3,000,000 (10%) = $300,000

1987 Actual Return: Difference between FMV on 1/1/87 and FMV on 12/31/87, adjusted for payments and contributions.

FMV 1/1/87	$3,000,000
+ contributions	600,000
- payments	(600,000)
	$3,000,000
- FMV 12/31/87	3,400,000
Actual Return	$ 400,000

1987 Asset Gain: Actual return less expected return
$400,000 - $300,000 = $100,000 gain

Calculation

Market Related Value of Plan Assets:

MRV 1/1/87	$3,000,000
+ expected return	300,000
+ contributions	600,000
- payments	(600,000)
+ 20% ($100,000)	20,000
MRV 12/31/87	$3,320,000

assuming that asset gains and losses are spread over five years.

The effect of including the asset gain or loss for the period (the "5a" portion) in net periodic pension cost is to adjust the actual return on plan assets (component 3) to the expected return. This effectively defers the entire asset gain or loss. Then, in following periods, this deferred gain or loss will be gradually included in the market related value and thus affect the expected return on plan assets that is included in net periodic pension cost. For example, if the actual return for the period were $500 and the expected return had been $400, then in the calculation of net periodic pension cost the actual return ($500) would be subtracted as the third component in the calculation and the gain for the period — the difference between the two ($100) — would be added. The net effect on expense for the period is a reduction of $400, the expected return. The result of this procedure is to "spread" the asset gains and losses and thus reduce the possible volatility on the reported expense figure.

The "5b" portion of the gain or loss component is the amortization of unrecognized net gains and losses, a new concept in this standard. Unrecognized net gains and losses include (1) asset gains and losses included in the market related value and (2) actuarial gains and losses from prior periods. This measurement is made as of the balance sheet date and is included in the reconciliation schedule now required to be shown in the footnotes. The company will determine the net asset gains and losses; the actuary will provide actuarial gains and losses.

The portion of net unrecognized gains and losses subject to amortization (the portion that may be included in net periodic pension cost for the period) is calculated by the company. It is the total net unrecognized gains and losses as of the **beginning** of the period (i.e., the total net unrecognized gains and losses from last period's reconciliation schedule) LESS the asset gains and losses that have not yet, as of that date, been included in the market-related value. If this adjusted net figure exceeds a defined CORRIDOR, then amortization is required. The CORRIDOR is 10% of

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the greater of the projected benefit obligation or the market related value of plan assets at the beginning of the period. The excess of the "adjusted net" over the corridor amount is divided by the average remaining service period of the employees currently in the plan. The result of this calculation is the amortization amount to be included in net periodic pension cost for the period. Table 4 demonstrates the calculation of the amortization of the net unrecognized gains and losses.

TABLE 4
Amortization of Net Gains and Losses as of the Beginning of the Period

Assumptions:		
Projected benefit obligation 1/1/88 (provided by actuary)		$4,480,000
Market related value of plan assets 1/1/88 (see Table 3)		$3,320,000
Net Unrecognized gains and losses 1/1/88:		
Net Actuarial gains and losses (provided by actuary)		$ 490,000 loss
Asset gains and losses already included in the market related value of plan assets as of 1/1/88 (see Table 3)		$ 20,000 gain
Employee information (presented in Table 1)		
Calculation:		
Actuarial gains and losses	$490,000 loss	
Asset gains and losses	20,000 gain	
Adjusted net, subject to amortization	$470, 000 loss	
Corridor: 10% (4,480,000) / 10% (3,320,000) greater of these	$448,000	
Excess of adjusted net over corridor	$22,000 loss	
Divided by average remaining service period	3 years*	
Amount to be included in net periodic pension cost for 1988	$7,333 loss**	

*Average Remaining Service Period:
Future Remaining Service Years/number of employees
30 future service years/10 employees = 3 years

**Since amortization is for a net loss, it will increase net periodic pension cost for the period.

This amortization can obviously cause either an increase or decrease in net periodic pension cost for the period, depending on whether the "net" is a gain (decrease) or loss (increase). Recall that the effect of the "5a" portion was to defer the current period's asset gain or loss to future periods (i.e., the current period's asset gain or loss is part of net unrecognized gains and losses at the beginning of the next period). Likewise, actuarial gains and losses for the current period are not included in the "net" until the beginning of the following period.

The sixth and final component of net periodic pension cost is the amortization of the NET OBLIGATION (or ASSET). The net obligation, also called the TRANSITION AMOUNT in the standard, originates at the point when the company changes (transitions) from APB 8 to SFAS 87. This transition amount is measured as the difference between the projected benefit obligation and the fair market value of the plan assets, plus or minus any pre-existing balance sheet accounts, at the beginning of the period when the new standard is first applied.

The transition amount is the combination of a change in accounting principle, a change in the measurement method, and a "catch-up" of sorts of those items that affected pension calculations under APB 8 (e.g., prior/past service cost) but were never, at least in total, disclosed in the financial statements. Generally, when a new standard is issued, the change from the old to the new is handled either as a retroactive application or as a cumulative effect in the period of change. SFAS 87 is a special exception. The transition amount is amortized over the average remaining service period measured at the point when the standard is first applied (or 15 years may be used if the average remaining service period is less than 15) on a straight-line basis. Thus, the accounting treatment is handled like a change in accounting estimate in current and prospective periods as opposed to a cumulative effect adjustment.

The transition amount may be visualized as the distance on a number line between the previous balance sheet account accumulated under the provisions of APB 8 and the funding status (the difference between the projected benefit obligation and the fair market value of the plan assets) at the beginning of the period when the new standard is first applied. Table 5 demonstrates the calculation of the transition amount.

The effect of the amortization of the transition amount on net periodic pension cost will depend upon whether the amount is a net obligation or a net asset at the initial application of SFAS 87. If the amount is a net obligation, then amortization will increase net periodic pension cost for the period; if it is a net asset, then the amortization will cause a decrease.

The six components are combined and the result is the expense shown on the income statement for the period. Table 6 summarizes the calculation of net periodic pension cost.

TABLE 5
Calculation of Transition Amount

Data for illustration:

*SFAS 87 will be applied for the first time in 1987.
*The actuary calculates the projected benefit obligation as $3,800,000 as of 1/1/87:

CASE 1: FMV = $3,000,000;
initial underfunded status = ($800,000)
prior balance sheet account is $70,000 liability

Net Obligation = $730,000

(800,000) (70,000) 0

CASE 2: FMV = $3,000,000;
initial underfunded status = ($800,000)
prior balance sheet account is $60,000 asset

Net Obligation = $860,000

(800,000) 0 60,000

CASE 3: FMV = $4,000,000;
initial overfunded status = $200,000
prior balance sheet account is $70,000 liability

Net Asset = $270,000

(70,000) 0 200,000

CASE 4: FMV = $4,000,000;
initial overfunded status = $200,000
prior balance sheet account is $60,000 asset

Net Asset = $140,000

0 60,000 200,000

Recognition of Balance Sheet Accounts

A difference between the amount expensed on the income statement as net periodic pension cost and the amount contributed to the plan will result in a balance sheet account, either prepaid pension cost or accrued pension cost. This procedure is exactly the same as it was under APB 8. And if there is an existing balance sheet account at the point of initial application of SFAS 87 (i.e., the one used in the calculation of the transition amount), its balance is carried forward as part of accrued pension cost or prepaid pension cost.

Effective for financial statements issued after December 15, 1988, any portion of the Accumulated Benefit Obligation that is unfunded at the balance sheet date must be shown as a MINIMUM LIABILITY. The accumulated benefit obligation is the present value of the benefits earned up to the balance sheet date. It differs from the projected benefit obligation in that the calculation does not include any provision for future events such as salary increases or promotions. It is the amount that theoretically the com-

The net obligation, also called the TRANSITION AMOUNT in the standard, originates at the point when the company changes (transitions) from APB No. 8 to SFAS No. 87.

pany would have to pay if the plan were terminated on the balance sheet date. Thus, if this obligation exceeds the fair market value of the plan assets, a liability equal to the excess exists and must be recognized.

From an accounting point of view, the recognition of this minimum liability must be accomplished by crediting a pension-related liability account to the extent necessary to force the balances in the prepaid/accrued pension cost account plus this newly created pension related liability account to equal the amount of the underfunding at the balance sheet date. This additional credit obviously necessitates a corresponding debit that is to be made to an Intangible Asset account, the balance of which may not exceed the sum of unrecognized prior service cost plus unrecognized net obligation. If the required debit exceeds this limit, the excess is treated as a separate reduction of owner's equity, net of tax. The logic behind this treatment is that the excess could have resulted only if a loss had been incurred. Accordingly, the adjustment is to owner's equity. The necessity for the minimum liability is reviewed each balance sheet date, and the related accounts are eliminated or adjusted as required.

TABLE 6
Calculation of Net Periodic Pension Cost

For the period ending 12/31/88
Determine the Amounts for each of the Six Components

1) Service cost . . . provided by the actuary
2) Interest cost:
   Projected Benefit Obligation (PBO) as of 1/1/88 × settlement rate
   PBO provided by actuary
   Settlement rate determined by company
3) Actual return on plan assets:
   Fair market value (FMV) on 12/31 - contributions + payments - FMV on 1/1
4) Amortization of prior service cost:
   Only applies to plans that have been amended subsequent to adoption of SFAS 87.
   a) Prior service cost . . . supplied by actuary
   b) Calculate future years of service as of amendment date (see Table 1)
   c) Prepare amortization schedule (see Table 2)
   d) Schedule is not adjusted unless there is a major curtailment of benefits.
5) Gain or Loss:
   5a) Asset gain/loss:
      Actual return - Expected return
      [1] actual return (see 3 above)
      [2] expected return
         Market Related Value (MRV) on 1/1/88 × expected rate of return
      [3] Calculate MRV as of 12/31/88 for use in 1989 calculations (see Table 3)
   5b) Amortization of net unrecognized gains/losses as of 1/1/88:
      [1] Start with total net unrecognized gains/losses from last period's reconciliation schedule
      [2] Adjust for asset gains/losses that were not included in MRV as of 12/31/last period
      [3] Combination of 1 and 2 are net unrecognized gains/losses subject to amortization
      [4] Calculate corridor of limitation
         Greater of 10% of
            PBO as of 1/1/88
               or
            MRV as of 1/1/88
      [5] Compare results in [3] to corridor limitation:
         Any excess of [3] over corridor is divided by the average remaining service period of employees currently in plan; note that average remaining service period may change each period. (See Table 1 for calculation.)
6) Amortization of transition amount:
   a) Transition amount calculated at first application of SFAS 87 (see Table 5)
   b) Calculate average remaining service years as of date SFAS 87 is first applied (see Table 1)
   c) a) divided by b) equals amortization amount.

Net periodic pension cost is the summation of these six components.

Disclosure Requirements

The new standard expands the disclosure requirements, as compared to those required by APB 8 and SFAS 36. More information is to be disclosed and it will be in a form that will enhance the user's understanding. The two most significant items to be disclosed are the components of net periodic pension cost and a reconciliation schedule. Net periodic pension cost is to be broken down into service cost, interest cost, actual return, and the net total of the other three components.

The reconciliation schedule provides a link between the funding status of the plan, as of the balance sheet date, and the amounts shown on the balance sheet. Information required includes the projected benefit obligation, with separate identification of the accumulated benefit obligation and vested benefits, the fair market value of the plan assets, and items for which recognition has been delayed. These delayed recognition items are unrecognized prior service cost; unrecognized gains and losses, including asset gains/losses not yet included in the market related value of plan assets; and unrecognized net obligation or asset. These are items that have not yet affected pension expense but will in the future. Disclosure of this type of information is a new requirement and should provide users with a great deal more insight regarding the true nature of pension obligations. Table 7 summarizes the preparation of the reconciliation sched-

TABLE 7
Preparation of Reconciliation Schedule

As of 12/31/88
[(2) provides link between (1) & (3)]

1) Determine funding status as of 12/31:
   PBO on 12/31 - FMV 12/31
2) Add/subtract items that have not yet affected net periodic pension cost.
   a) Unrecognized prior service cost:
      Balance on 1/1/88 less amortization for 1988 (see 4 in Table 6)
   b) Unrecognized gains and losses:
      Balance on 1/1/88
      less amortization for 1988 (see 5b in Table 6)
      plus asset gain/loss for 1988 (see 5a in Table 6)
      plus actuarial gain/loss for 1988, from actuary.
   c) Unrecognized transition amount:
      Balance on 1/1/88 less amortization (see 6 in Table 6)
   d) Adjustment for minimum liability:
      Balance in additional pension-related liability account as of 12/31/88.
3) Total in Balance sheet accounts:
   Balance sheet accounts include both
   a) Accrued/prepaid pension and
   b) Additional pension-related liability

Summary:
Funding status
+/- items not yet affecting net periodic pension cost
= balance sheet accounts

TABLE 8
SFAS 87
Disclosure Requirements

A. Description of the plan including employee groups covered, type of benefit formula, funding policy, types of assets held, significant non-benefit liabilities, nature and effect of significant matters affecting comparability for all periods presented.
B. Net periodic pension cost for the period.
C. Reconciliation schedule.
D. Assumed weighted-average settlement rate and the rate of compensation increase used to measure the projected benefit obligation.
E. Weighted-average expected long-term rate of return on plan assets.
F. If applicable, the amounts and types of securities of the employer and related parties included in plan assets, and approximate amount of annual benefits covered by annuity contracts issued by the employer and related parties. Also, if applicable, the alternative amortization methods used for prior service cost or net gains or losses and the existence and nature of any substantive commitment outside the written terms of the plan.

ule. Table 8 lists the complete requirements for disclosure.

Summary

The full impact of SFAS 87 will not be felt until 1989, when it is effective in its entirety, although it is probable that many companies will apply all of the requirements earlier. The standard has retained aspects from prior practice such as reporting net cost, offsetting liabilities and assets, and delayed recognition of some events. It has also incorporated several new concepts and requirements. Allowing only one actuarial cost method should improve comparability between companies. Incorporating the effects of future events into the evaluation process should aid in a more realistic view of pension obligations and their potential effect on plan sponsors. The expanded disclosure requirements are certainly an improvement and should raise the level of users' understanding. Ω

Kathryn M. Means, Ph.D., CPA, *is Associate Professor of Accounting at Florida Atlantic University, Boca Raton, Florida. She is a member of the FICPA, AAA, and the AWSCPA.*